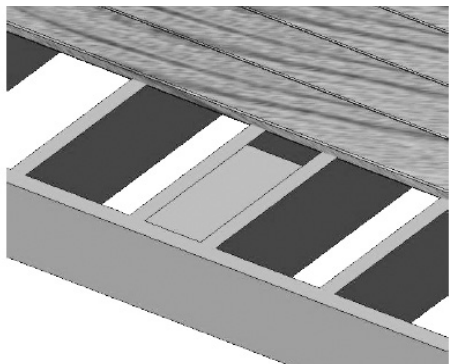
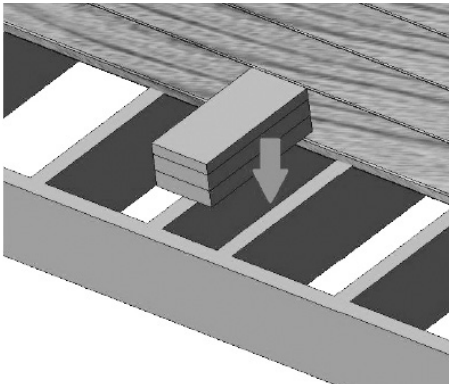


CHESTERFIELD NEWEL INSTALLATION INSTRUCTIONS

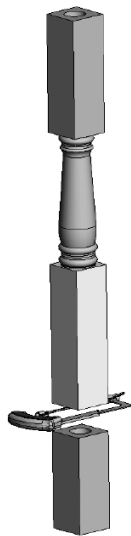
1. PREPARATION FOR INSTALLATION OF CHESTERFIELD NEWEL ON A WOODEN DECK OR PORCH FLOOR

A. With a wooden floor, sufficient blocking must be installed in the floor framing to ensure that the newel installation is secure. The bolts provided for wooden floor installation are 6" long. Be sure to install blocking under the floor surface that is 3"-4" thick. Make sure the thickness of your blocking is sufficient so that the bolts can be tightened properly.



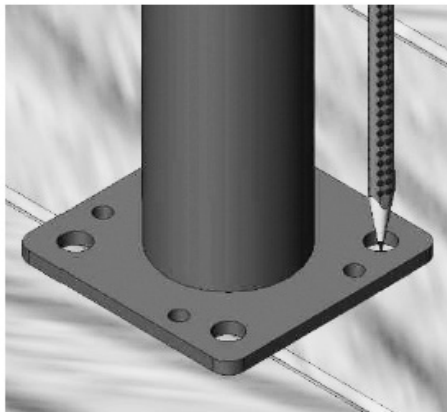
2. CUT CHESTERFIELD NEWEL TO LENGTH

The Chesterfield newel is 54" tall and will need to be cut to final length. Based on the height of your railing, determine the required newel height and cut the newel to length using a hacksaw or reciprocating saw with a metal-cutting saw blade. You will always cut the bottom portion of the newel shorter, but depending on your application and aesthetic preferences, you may also cut a portion of the top of the newel. Be sure the square portions of the newel at the top and bottom remain long enough to properly attach your handrail.



3. INSTALL NEWEL MOUNTING BRACKET

Take the 36" tall black-colored newel mounting bracket and place it in position on your floor. The bottom flange of the bracket has 8 holes in total; 4 large holes in the corners and 4 smaller threaded holes next to the corner holes. **YOU WILL NOT USE THE SMALL THREADED HOLES.** Mark the 4 corner holes on the floor surface with a pencil. Set the bracket aside.



4. DRILL HOLES FOR NEWEL MOUNTING BRACKET

A. For a wooden floor, use a 5/16" x 12" long "aircraft" bit to drill completely through the floor and blocking.

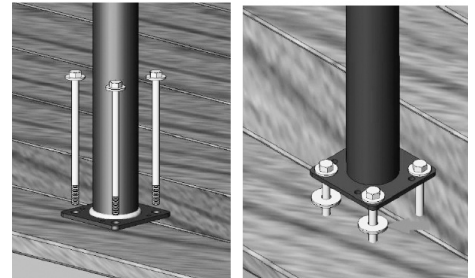
B. For a concrete floor, use a 3/16" masonry drill bit with a hammer-drill or rotary hammer and drill 3" to 3-1/2" into the concrete. **VACUUM ALL DUST AND DEBRIS OUT OF THE HOLES.**



5A. SECURE NEWEL MOUNTING BRACKET WITH BOLTS – WOODEN FLOOR

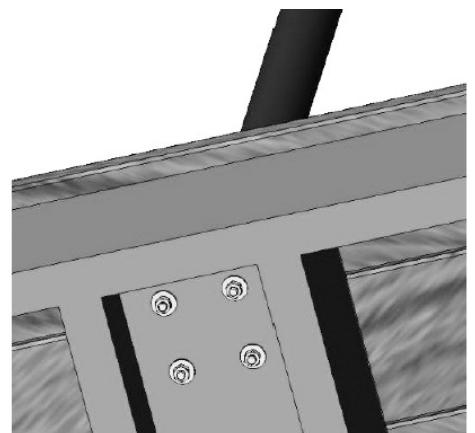
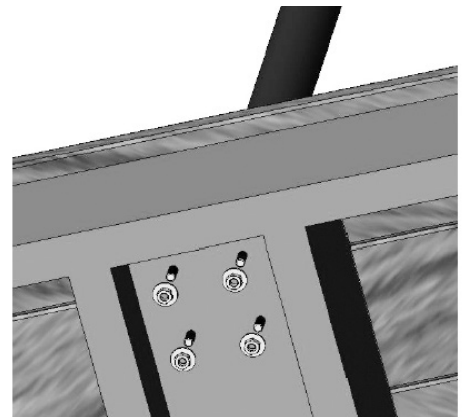
A. Place the newel mounting bracket in position over the holes you drilled in Step 4, and insert 5/16"x6" bolts with washers through the 4 corner holes and through the blocking so the threaded end of the bolt is visible below the blocking. Check

the newel mounting bracket for plumb (plumb = straight up and down). If it is out of plumb, you will need to shim underneath the mounting flange until the 36" tall round tube of the bracket is plumb in all directions. It is recommended that you use wide washers (NOT INCLUDED) to shim the bracket until it is plumb.



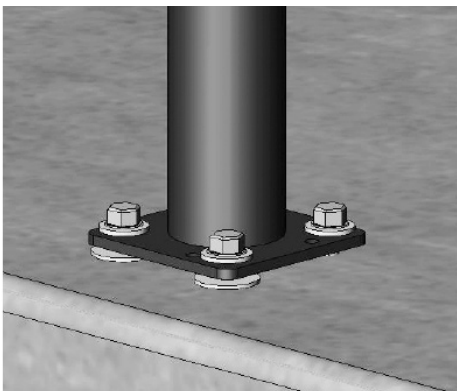
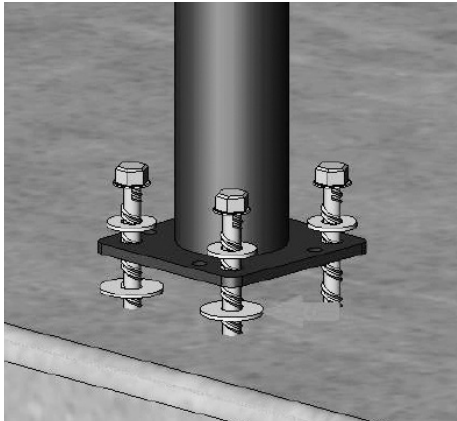
Use shimming washers if necessary

B. After shimming the newel mounting bracket so it is plumb, use the 5/16" nuts and washers to secure newel mounting bracket to wooden floor.



5B. SECURE NEWEL MOUNTING BRACKET WITH BOLTS – CONCRETE FLOOR

A. Place the newel mounting bracket in position over the holes you drilled in Step 4, and check the newel mounting bracket for plumb (plumb = straight up and down). If it is out of plumb, you will need to shim underneath the mounting flange until the 36" tall round tube of the bracket is plumb in all directions. It is recommended that you use wide washers (NOT INCLUDED) to shim the bracket until it is plumb. Once the newel mounting bracket has been shimmed plumb, insert 1/4"x3" concrete anchor bolts with washers through the 4 corner holes and use 7/16" impact socket driven by an impact driver or impact wrench to tighten the concrete anchor bolts securely.

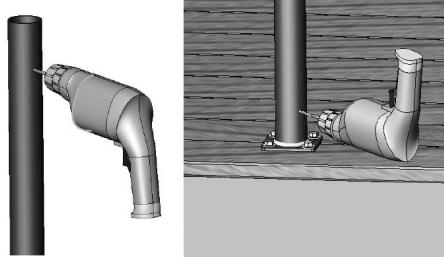


Use shimming washers if necessary

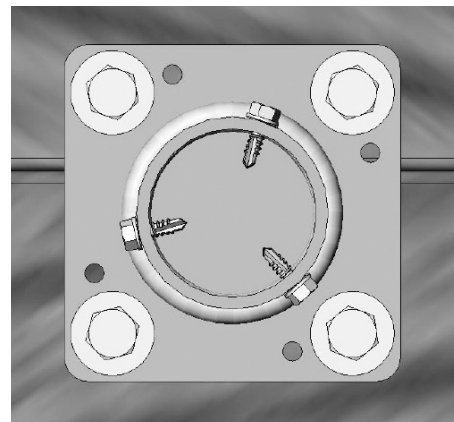
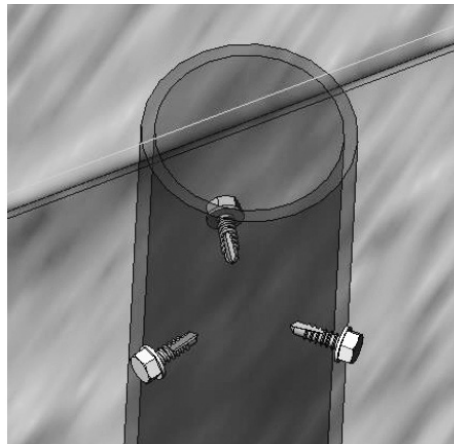
6. INSTALL NEWEL POST SHIMMING SCREWS ON NEWEL MOUNTING BRACKET

The steel tube inside the Chesterfield newel is larger than the steel tube that is part of the newel mounting bracket. Install the six (6) 1/2" long, self-drilling hex head screws to act as shims to ensure a snug fit between the newel mounting bracket and the Chesterfield newel.

A. Measure down 3 inches from the top and 3 inches up from the bottom of the 36" tall steel tube of newel mounting bracket, and mark those locations (you can start anywhere around the steel tube). Repeat this process 1/3 & 2/3 of the way around the circumference from your starting point. You will have made 6 marks. Use a 1/8" diameter drill bit and drill through the wall of the steel tube at each of your 6 marks.



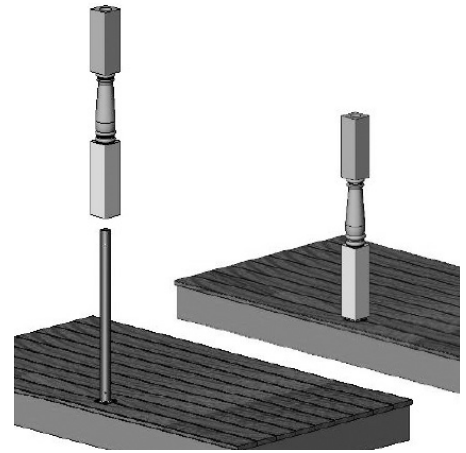
B. Use a 1/4" hex driver bit in a drill to install the six (6) 1/2" long, self-drilling hex head screws. Screw the fasteners tight to the steel tube. The heads of the screws will act as shims to create a snug fit between the Chesterfield newel and the newel mounting bracket.



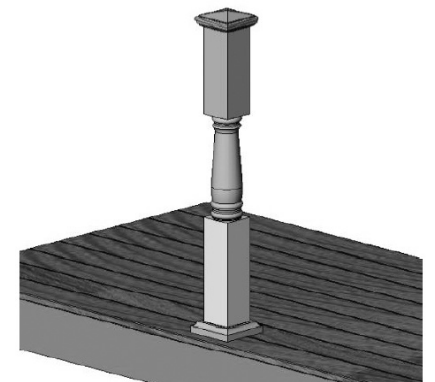
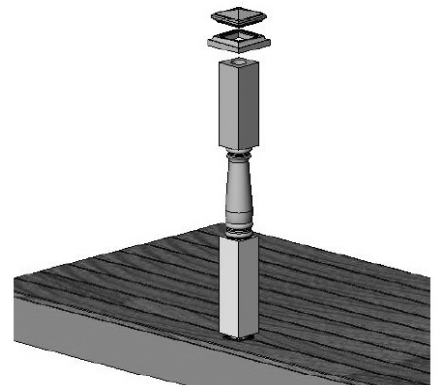
Shimming screws installed in 3 locations at the top and bottom of the newel mounting bracket, each 1/3 of the way around the steel tube.

7. SLIDE NEWEL OVER NEWEL MOUNTING BRACKET

A. Slide the Chesterfield newel that you cut to length in Step 2, over the newel mounting bracket and slide it down until it comes to rest on the heads of the newel mount bracket attachment bolts.



B. Next, slide the base skirt over the Chesterfield newel, and slide it down to the floor. Next, slide the pyramid newel cap onto the top of the Chesterfield newel.



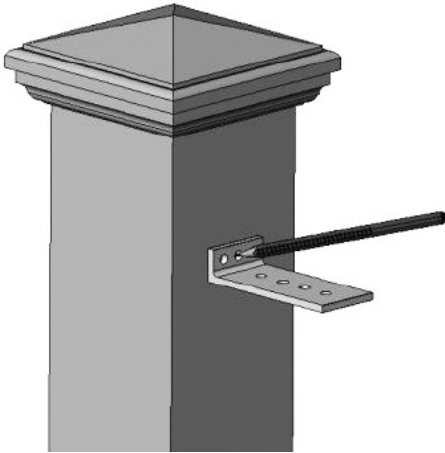
Your Chesterfield newel is now ready for the installation of your handrails.
NOTE: When the handrail brackets are attached to the Chesterfield newel, the fasteners attaching the rail mounting brackets to the newel will also secure the newel to the newel mounting bracket so the Chesterfield newel will no longer be able to rotate.

8. MARK AND ATTACH THE HANDRAIL ATTACHMENT BRACKETS TO THE CHESTERFIELD NEWEL

Refer to the installation instructions that came with your rail system for assembling your rail and locating the rail attachment brackets on the newel for installation.

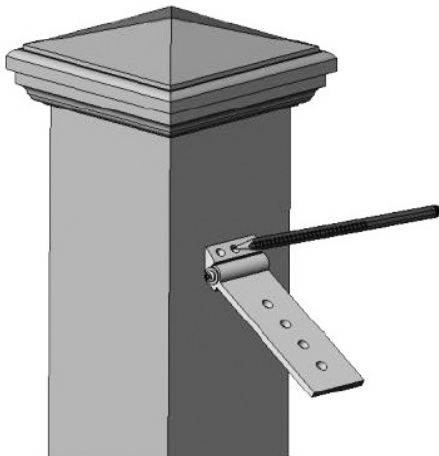
A. Locate the top rail attachment brackets on the Chesterfield newel and with a pencil, mark the center hole of each bracket on the face of the newel. Repeat for the bottom brackets.

LEVEL RAIL ATTACHMENT BRACKET



Mark the center screw hole of the level rail attachment bracket on the face of the newel. Repeat for the bottom rail bracket.

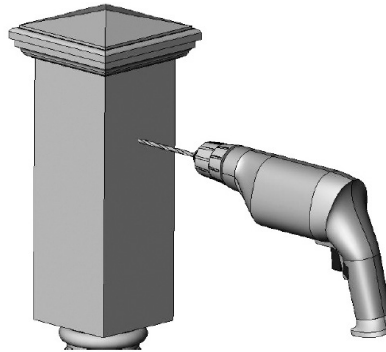
STAIR RAIL ATTACHMENT BRACKET



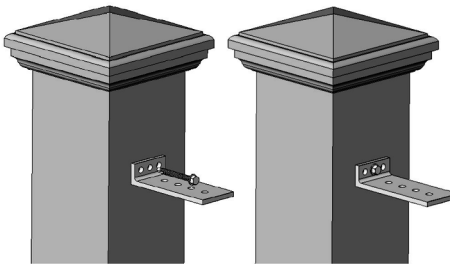
Mark the center screw hole of the stair rail attachment bracket on the face of the newel. Repeat for the bottom rail bracket.

B. NOTE: VERY IMPORTANT! BE SURE CHESTERFIELD NEWEL IS ROTATED TO THE PROPER POSITION BEFORE DRILLING HOLES FOR RAIL ATTACHMENT BRACKETS! SEE NOTE AT STEP 7.

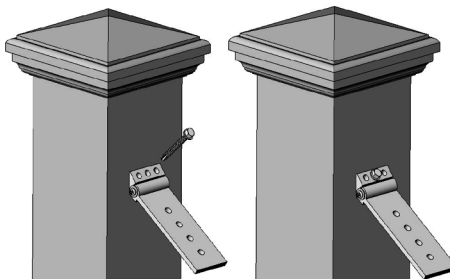
C. Use a 1/8" drill bit and drill a pilot hole straight into the newel at your marks. **NOTE: VERY IMPORTANT! BE SURE TO DRILL THROUGH BOTH THE STEEL TUBE INSIDE THE CHESTERFIELD NEWEL AND THROUGH THE STEEL TUBE OF THE NEWEL MOUNTING BRACKET.** After drilling through both tubes with a 1/8" drill bit, use a 3/16" bit and drill through the same holes again to enlarge the holes. **NOTE: IT IS VERY IMPORTANT TO START WITH A 1/8" DRILL BIT TO DRILL A PILOT HOLE SO THE LARGER 3/16" BIT DOES NOT WANDER.**



Use a drill with a 3/8" hex head driver bit and fasten each rail bracket, through the center hole only, to the newel with the included 1/4" hex head self-drilling screws. Be careful to make sure the tip of the screw enters the pilot hole in the steel tube before you start exerting pressure to drive the screw into the steel tubes. **DO NOT OVERTIGHTEN OR YOU WILL CRUSH THE POLYURETHANE MATERIAL FROM WHICH THE NEWEL IS MADE.**



LEVEL RAIL

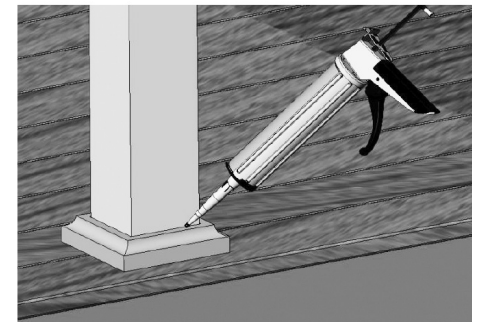
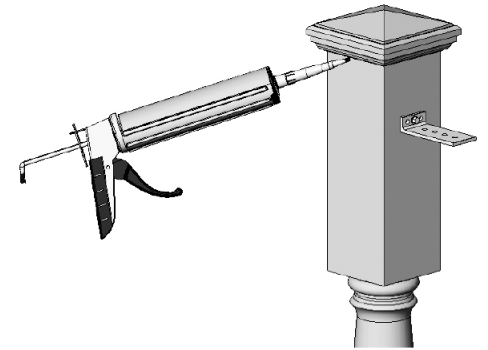


STAIR RAIL

Follow the installation instructions that came with your railing to complete the railing installation.







9. Use white, acrylic, adhesive caulk and apply caulk to the small gap on the underside of the pyramid cap that is between the newel and cap.

Use your finger to force the caulk up into the small gap. Repeat this process with the base skirt. Clean any excess caulk with a damp rag. Rinse out the rag and repeat the cleaning process until all excess caulk is removed and only the caulk in the small gaps remains.



THE INSTALLATION OF YOUR CHESTERFIELD NEWEL IS COMPLETE

TOOLS & SUPPLIES NEEDED FOR INSTALLATION		USE
Necessary	Hack Saw or Reciprocating Saw with Metal Cutting Blade	Cut Chesterfield newel to length
Necessary	Cordless Drill	Drill holes, drive fasteners
Recommended	Cordless Impact Driver	Drive fasteners
Necessary	Hammer	Various
Necessary	Caulking Gun	Apply caulk to cap & base
Necessary	Try-square or Combination Square	Mark Chesterfield newel for cutting
Necessary	Magnetic Driver Bit Holder	Drive various fasteners
Necessary	3/8" Hex Driver Bit	Drive rail mounting bracket hex head screws
Necessary	1/4" Hex Driver Bit	Drive newel mount bracket shimming screws
Necessary	7/16" Impact Socket	Drive concrete bolts for newel bracket mounting - concrete floor application
Necessary	1/2" Wrenches / Sockets	Tighten newel bracket mounting bolts - wood floor applicatoin
Necessary	1/8" Twist Drill Bit	Pilot holes for baluster screws
Necessary	5/16" x 12" Long Twist Drill "Aircraft Bit"	Pilot holes for rail mounting bracket hex head screws.
Necessary	3/16" Twist Drill Bit	Pilot holes through aluminum rail stiffeners for baluster screws
Necessary	Rags	Cleanup caulk squeeze out
Necessary	Bucket	Cleanup caulk squeeze out
Necessary	Water for Cleanup	Cleanup caulk squeeze out

CHESTERFIELD NEWEL HARDWARE KIT		
HARDWARE KIT ITEM		QUANTITY PER KIT
1/4" x 3" Concrete Anchor		4
1/4" x 2" Hex Head Rail Bracket Attachment Screws		4
#8-18X1/2" Self Drilling Screw		6
5/16" x 6" Hex Head Bolt		4
5/16" Nut		4
5/16" Washer		8